

IN THE CLAIMS:

Please amend claims 4-12, 16-24, 28-31, 35-43 and add new claims 44-63 as follows.

1. (Previously Presented) Method of deciding on performing a communication connection changeover of a subscriber terminal (T1) in a wireless communication network comprising at least one access node (AP1, AP2, AP3), wherein said subscriber terminal is able to communicate with an access node in said wireless communication network,

said method comprising the steps of:

detecting communication information from said at least one access node, said communication information comprising frequency band information indicating at least one frequency band where said at least one access node is capable to communicate;

transmitting said communication information from said at least one access node to said subscriber terminal by signaling;

processing the transmitted communication information and determining based on the communication information a communication connection capability of at least part of the at least one access node on the basis of the frequency band information; and

using the processing result for a decision on a communication connection changeover of the subscriber terminal.

2. (Original) Method according to claim 1, wherein said wireless communication network is a WLAN, preferably based on an IEEE 802.11 standard.

3. (Previously Presented) Method according to claim 2, wherein said at least one frequency band comprise a frequency band of 2.4 GHz and one or more frequency bands between 5 and 6 GHz.

4. (Currently Amended) Method according to ~~any of the preceding claims~~ claim 1, wherein said communication information further comprises a multiple band indicator related to at least part of the at least one access node.

5. (Currently Amended) Method according to ~~any of the preceding claims~~ claim 1, wherein said communication information further comprises a traffic load indicator related to the at least one frequency band of at least part of the at least one access node.

6. (Currently Amended) Method according to ~~any of the preceding claims~~ claim 1, wherein said communication information further comprises a frequency band coverage indicator related to frequency bands of neighboring access nodes of the transmitting access node in the wireless communication network.

7. (Currently Amended) Method according to ~~any of the preceding claims~~ claim 1, wherein said information in said communication information comprise a frequency channel indicator for indicating the frequency channel used by at least part of the at least one access node at the respective frequency band.

8. (Currently Amended) Method according to ~~any of the preceding claims~~ claim 1, wherein said processing step further comprises steps of
detecting a signal strength indicator on a predetermined frequency band; and

comparing the detected signal strength indicator with a predefined threshold value, wherein the result of the comparison indicates an estimation of the connection capability of an access node on another frequency band.

9. (Currently Amended) Method according to ~~any of the preceding claims~~ claim 1, wherein the decision on a communication connection changeover is made by the subscriber terminal.

10. (Currently Amended) Method according to ~~any of the preceding claims~~ claim 1, wherein a result of the decision on a communication connection changeover of the subscriber terminal is a change of the communication connection from the present frequency band to another frequency band which is common to the subscriber terminal and the access node associated with the subscriber terminal.

11. (Currently Amended) Method according to ~~any of claims 1 to 9~~ claim 1, wherein a result of the decision on a communication connection changeover of the subscriber terminal is a change of the communication connection from the current access node to a specific frequency band of a neighboring access node which is common to the subscriber terminal and the neighboring access node to be associated with the subscriber terminal.

12. (Currently Amended) Method according to ~~any of the preceding claims~~ claim 1, wherein communication information transmitted from two or more access nodes in the wireless communication network are processed in said processing step.

13. (Previously Presented) System for deciding on performing a communication connection changeover of a subscriber terminal (T1) in a wireless communication

network comprising at least one access node (AP1, AP2, AP3), wherein said subscriber terminal is able to communicate with at least one access node in said wireless communication network,

said system comprising:

means for detecting and transmitting communication information from said at least one access node to said subscriber terminal, said communication information comprising frequency band information indicating at least one frequency band where said at least one access node is capable to communicate, wherein said means for detecting and transmitting the communication information of the at least one access node are adapted to incorporate the communication information in a signaling to said subscriber terminal;

means for processing the transmitted communication information so as to determine based on the communication information a communication connection capability of at least part of the at least one access node on the basis of the frequency band information; and

means for deciding on a communication connection changeover of the subscriber terminal by using the processing result.

14. (Original) System according to claim 13, wherein said wireless communication network is a WLAN, preferably based on an IEEE 802.11 standard.

15. (Previously Presented) System according to claim 14, wherein said at least one frequency band comprises a frequency band of 2.4 GHz and one or more frequency bands between 5 and 6 GHz.

16. (Currently Amended) System according to ~~any of claims 13 to 15~~ claim 13, wherein said communication information further comprises a multiple band indicator related to at least part of the at least one access node.

17. (Currently Amended) System according to ~~any of claims 13 to 16~~ claim 13, wherein said communication information further comprises a traffic load indicator related to the at least one frequency band of at least part of the at least one access node.

18. (Currently Amended) System according to ~~any of claims 13 to 17~~ claim 13, wherein said communication information further comprises a frequency band coverage indicator related to frequency bands of neighboring access nodes of the at least one access node in the wireless communication network.

19. (Currently Amended) System according to ~~any of claims 13 to 19~~ claim 13, wherein said communication information further comprises a frequency channel indicator for indicating the frequency channel used by the access node at the respective frequency band.

20. (Currently Amended) System according to ~~any of claims 13 to 19~~ claim 13, further comprising means for detecting a signal strength indicator on a predetermined frequency band; wherein said means for processing are adapted to compare the detected signal strength indicator with a predefined threshold value, the result of the comparison indicating an estimation of the connection capability of an access node on another frequency band, and said means for deciding on a communication connection changeover are adapted use the result of said comparison.

21. (Currently Amended) System according to ~~any of claims 13 to 20~~ claim 13, wherein the means for deciding on a communication connection changeover is located in the subscriber terminal.

22. (Currently Amended) System according to ~~any of claims 13 to 21~~ claim 13, wherein the means for deciding on a communication connection changeover are adapted to decide to change the communication connection from the present frequency band to another frequency band which is common to the subscriber terminal and the access node associated with the subscriber terminal.

23. (Currently Amended) System according to ~~any of claims 13 to 21~~ claim 13, wherein the means for deciding on a communication connection changeover are adapted to decide to change the communication connection from the current access node to a specific frequency band of a neighboring access node which is common to the subscriber terminal and the neighboring access node to be associated with the subscriber terminal.

24. (Currently Amended) System according to ~~any of claims 13 to 23~~ claim 13, wherein the means for processing the transmitted communication information are adapted to process communication information transmitted from two or more access nodes in the wireless communication network.

25. (Previously Presented) Access node for a wireless communication network said access node comprising:

means for detecting and transmitting communication information to said subscriber terminal, said communication information comprising frequency band information indicating at least one frequency band where at least one access node is

capable to communicate, wherein said means for detecting and transmitting the communication information are adapted to incorporate the communication information in a signaling to said subscriber terminal.

26. (Original) Access node according to claim 25, wherein said wireless communication network is a WLAN, preferably based on an IEEE 802.11 standard.

27. (Previously Presented) Access node according to claim 26, wherein said at least one frequency band comprise a frequency band of 2.4 GHz and one or more frequency bands between 5 and 6 GHz.

28. (Currently Amended) Access node according to ~~any of claims 25 to 27~~ claim 25, wherein said communication information further comprises a multiple band indicator related to an access node.

29. (Currently Amended) Access node according to ~~any of claims 25 to 28~~ claim 25, wherein said communication information further comprises a traffic load indicator related to the at least one frequency band of an access node.

30. (Currently Amended) Access node according to ~~any of claims 25 to 29~~ claim 25, wherein said communication information further comprises a frequency band coverage indicator related to frequency bands of neighboring access nodes of the access node in the wireless communication network.

31. (Currently Amended) Access node according to ~~any of claims 25 to 30~~ claim 25, wherein said communication information further comprises a frequency channel indicator for indicating the frequency channel used by the access node at the respective frequency band.

32. (Previously Presented) Subscriber terminal for communicating in a wireless communication network comprising at least one access node (AP1, AP2, AP3),

said subscriber terminal comprising:

means for receiving communication information transmitted from at least one access node, said communication information comprising frequency band information indicating at least one frequency band where at least one access node is capable to communicate, and being transmitted from said at least one access node to said subscriber terminal by signaling;

means for processing the transmitted communication information so as to determine based on the communication information a communication connection capability of at least part of the at least one access node on the basis of the frequency band information; and

means for deciding on a communication connection changeover of the subscriber terminal by using the processing result.

33. (Original) Subscriber terminal according to claim 32, wherein said wireless communication network is a WLAN, preferably based on an IEEE 802.11 standard.

34. (Previously Presented) Subscriber terminal according to claim 33, wherein said at least one frequency band comprises a frequency band of 2.4 GHz and one or more frequency bands between 5 and 6 GHz.

35. (Currently Amended) Subscriber terminal according to ~~any of claims 32 to 34~~ claim 32, wherein said means for receiving the communication information of the access

node are adapted to extract the communication information from a beacon packet broadcasted from the access node.

36. (Currently Amended) Subscriber terminal according to ~~any of claims 32 to 35~~ claim 32, wherein said communication information further comprises a multiple band indicator related to at least part of the at least one access node.

37. (Currently Amended) Subscriber terminal according to ~~any of claims 32 to 36~~ claim 32, wherein said communication information further comprises a traffic load indicator related to the at least one frequency band of at least part of the at least one transmitting access node.

38. (Currently Amended) Subscriber terminal according to ~~any of claims 32 to 37~~ claim 32, wherein said communication information further comprises a frequency band coverage indicator related to frequency bands of neighboring access nodes of the transmitting access node in the wireless communication network.

39. (Currently Amended) Subscriber terminal according to ~~any of claims 32 to 38~~ claim 32, wherein said communication information further comprises a frequency channel indicator for indicating the frequency channel used by the access node at the respective frequency band.

40. (Currently Amended) Subscriber terminal according to ~~any of claims 32 to 39~~ claim 32, further comprising means for detecting a signal strength indicator on a predetermined frequency band; wherein said means for processing are adapted to compare the detected signal strength indicator with a predefined threshold value, the result of the comparison indicating an estimation of the connection capability of an

access node on another frequency band, and said means for deciding on a communication connection changeover are adapted use the result of said comparison.

41. (Currently Amended) Subscriber terminal according to ~~any of claims 32 to 40~~ claim 32, wherein the means for deciding on a communication connection changeover are adapted to decide to change the communication connection from the present frequency band to another frequency band which is common to the subscriber terminal and the access node associated with the subscriber terminal.

42. (Currently Amended) Subscriber terminal according to ~~any of claims 32 to 40~~ claim 32, wherein the means for deciding on a communication connection changeover are adapted to decide to change the communication connection from the current access node to a specific frequency band of a neighboring access node which is common to the subscriber terminal and the neighboring access node to be associated with the subscriber terminal.

43. (Currently Amended) Subscriber terminal according to ~~any of claims 32 to 42~~ claim 32, wherein the means for processing the transmitted communication information are adapted to process communication information transmitted from two or more access node in the wireless communication network.

44. (New) A computer program product for a computer, comprising software code portions for making, when said product is run on the computer, said computer to function as an access node in a wireless communication network,

said computer program product is configured to work as:

means for detecting and transmitting communication information to said subscriber terminal, said communication information comprising frequency band information indicating at least one frequency band where at least one access node is capable to communicate, wherein said means for detecting and transmitting the communication information are adapted to incorporate the communication information in a signaling to said subscriber terminal.

45. (New) A computer program product for a computer, comprising software code portions for making, when said product is run on the computer, said computer to function as a subscriber terminal communicating in a wireless communication network comprising at least one access node,

said computer program product is configured to work as:

means for receiving communication information transmitted from at least one access node, said communication information comprising frequency band information indicating at least one frequency band where at least one access node is capable to communicate, and being transmitted from at least one access node to said subscriber terminal by signaling;

means for processing the transmitted communication information so as to determine based on the communication information a communication connection capability of at least part of the at least one access node on the basis of the frequency band information; and

means for deciding on a communication connection changeover of the subscriber terminal by using the processing result.

46. (New) A computer program product according to claim 44, wherein said computer program product comprises a computer-readable medium on which said software code portions are stored.

47. (New) A computer program product according to claim 44, wherein said computer program product is directly loadable into the internal memory of the computer.

48. (New) Method usable in an access node entity for a decision procedure on performing a communication connection changeover of a subscriber terminal in a wireless communication network comprising at least one access node, wherein said subscriber terminal is able to communicate with an access node in said wireless communication network,

said method comprising the steps of:

detecting communication information from said at least one access node, said communication information comprising frequency band information indicating at least one frequency band where said at least one access node is capable to communicate;

transmitting said communication information from said at least one access node to said subscriber terminal by signaling.

49. (New) Method usable in a subscriber terminal entity for a decision procedure on of deciding on performing a communication connection changeover of a subscriber terminal in a wireless communication network comprising at least one access node, wherein said subscriber terminal is able to communicate with an access node in said wireless communication network,

said method comprising the steps of:

receiving communication information from said at least one access node, said communication information comprising frequency band information indicating at least one frequency band where at least one access node is capable to communicate, by signaling;

processing the transmitted communication information and determining based on the communication information a communication connection capability of at least part of the at least one access node on the basis of the frequency band information; and

using the processing result for a decision on a communication connection changeover of the subscriber terminal.

50. (New) The method according to claim 1, wherein the signaling by means of which the communication information is transmitted comprises a transmission of one or more frames.

51. (New) The method according to claim 1, wherein the signaling by means of which the communication information is transmitted comprises a Probe Request/Probe Response.

52. (New) The method according to claim 4, wherein the multiple band indicator indicates at least one frequency band.

53. (New) The system according to claim 13, wherein the signaling by means of which the communication information is transmitted comprises a transmission of one or more frames.

54. (New) The system according to claim 13, wherein the signaling by means of which the communication information is transmitted comprises a Probe Request/Probe Response.

55. (New) The system according to claim 16, wherein the multiple band indicator indicates at least one frequency band.

56. (New) The access node according to claim 25, wherein the signaling by means of which the communication information is transmitted comprises a transmission of one or more frames.

57. (New) The access node according to claim 25, wherein the signaling by means of which the communication information is transmitted comprises a Probe Request/Probe Response.

58. (New) The access node according to claim 28, wherein the multiple band indicator indicates at least one frequency band.

59. (New) The subscriber terminal according to claim 32, wherein the signaling by means of which the communication information is received comprises a transmission of one or more frames.

60. (New) The subscriber terminal according to claim 32, wherein the signaling by means of which the communication information is received comprises a Probe Request/Probe Response.

61. (New) The subscriber terminal according to claim 36, wherein the multiple band indicator indicates at least one frequency band.

62. (New) A computer program product according to claim 45, wherein said computer program product comprises a computer-readable medium on which said software code portions are stored.

63. (New) A computer program product according to claim 45, wherein said computer program product is directly loadable into the internal memory of the computer.